SERIAL TO PARALLEL CONVERTER 10

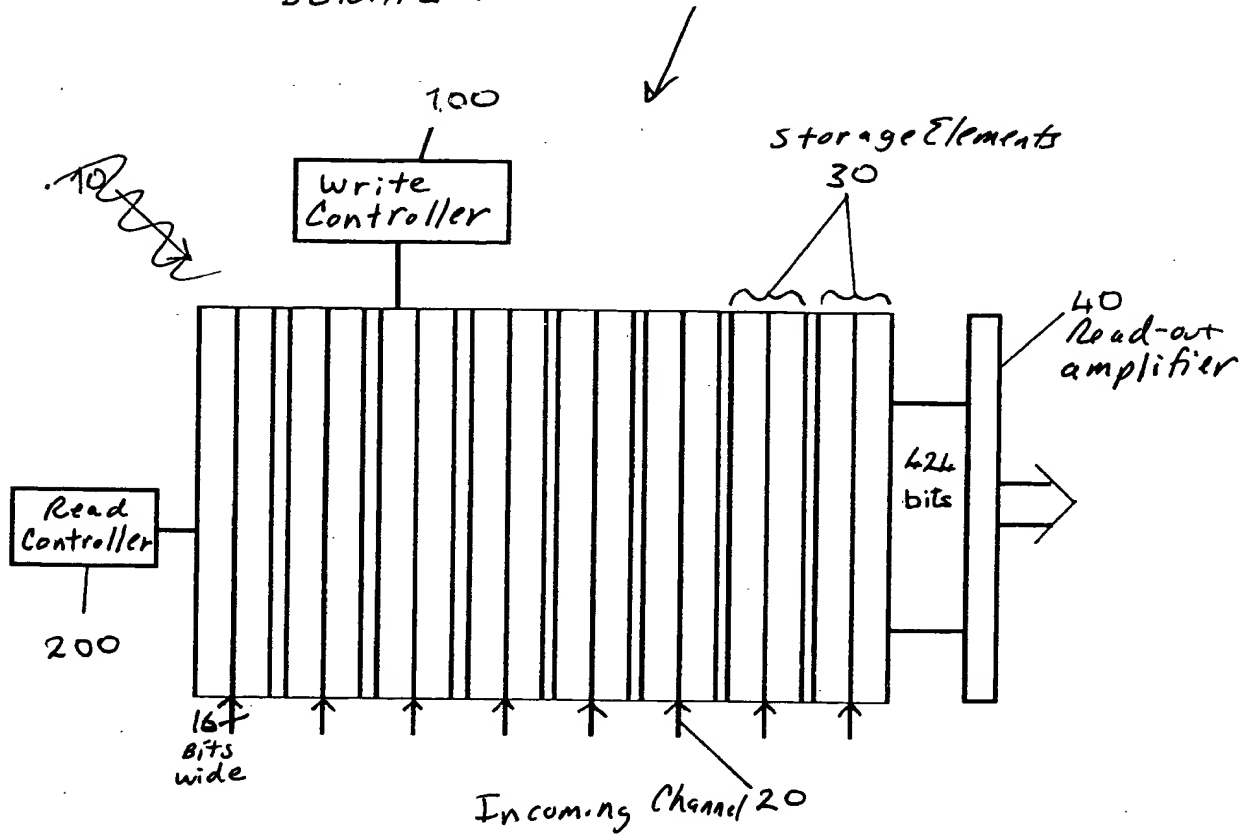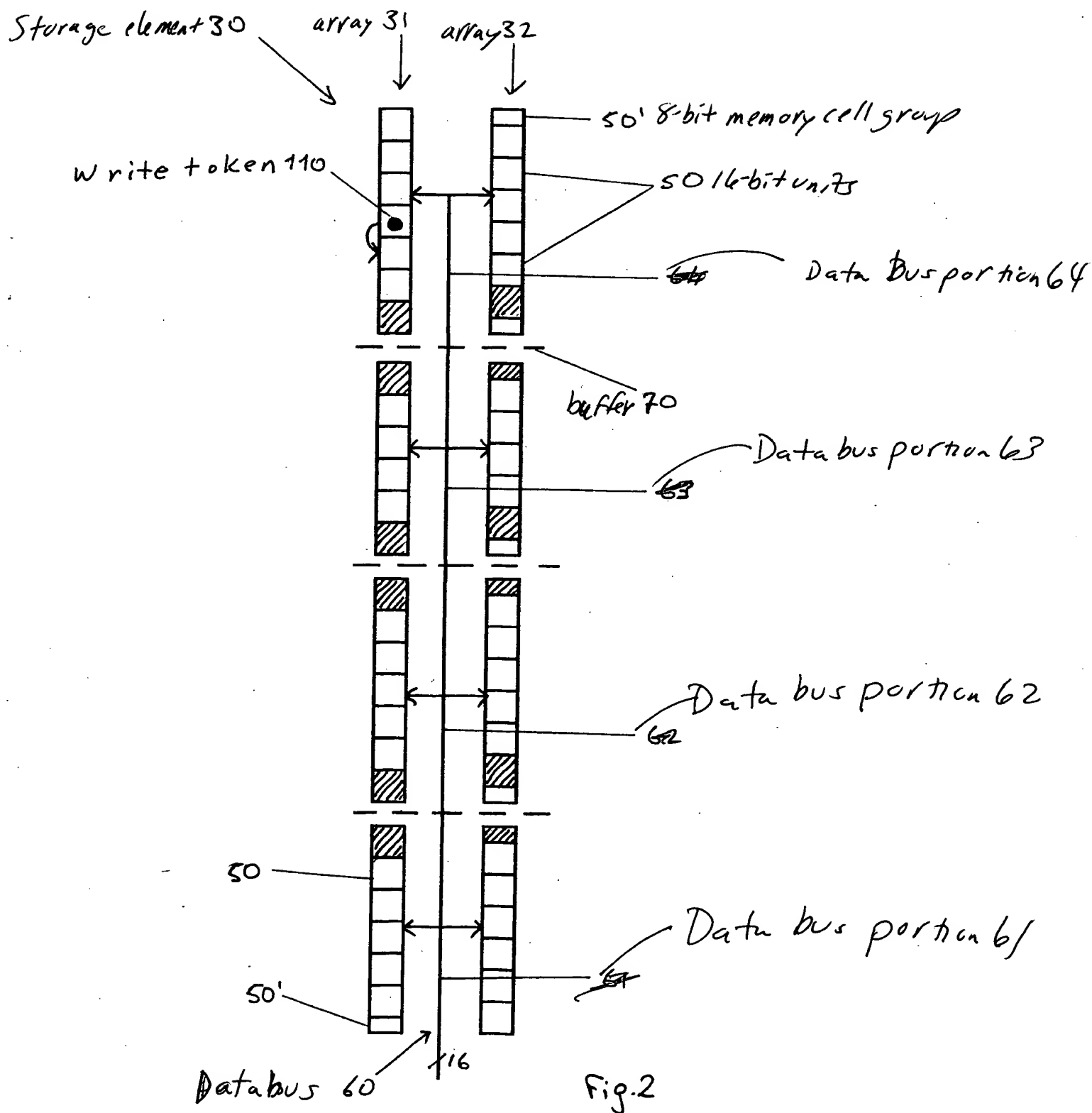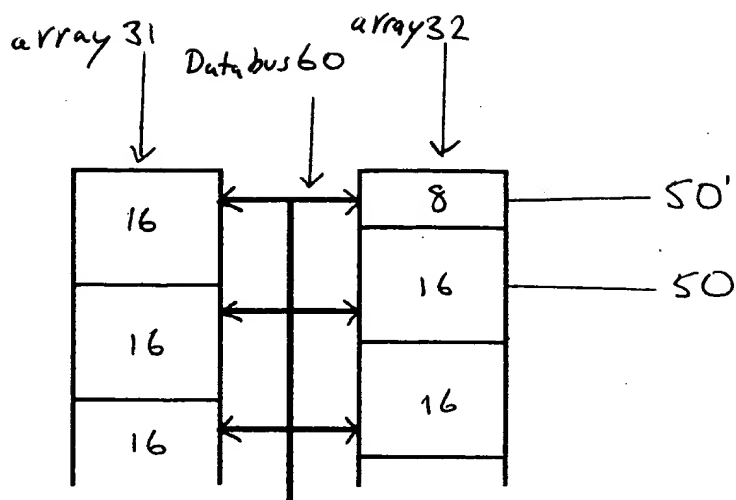Storage Elements 30

100

Write Controller

40 Read-out amplifier

Read Controller

200

64 bits

16 Bits wide

Incoming Channel 20

Fig. 1

Storage element 30   array 31   array 32

50' 8-bit memory cell group

Write token 110

50 16-bit units

Data Bus portion 64

buffer 70

Data bus portion 63

Data bus portion 62

50

50'

Data bus portion 61

Databus 60   x16

Fig.2

array 31   Databus 60   array 32

| 16 |
| 16 |
| 16 |

| 8 | — 50'
| 16 | — 50
| 16 |

Fig. 3

Write token 110

30

31 32

Serial to Parallel Converter
10

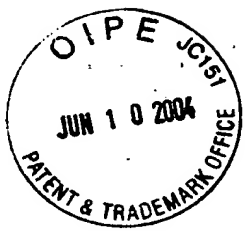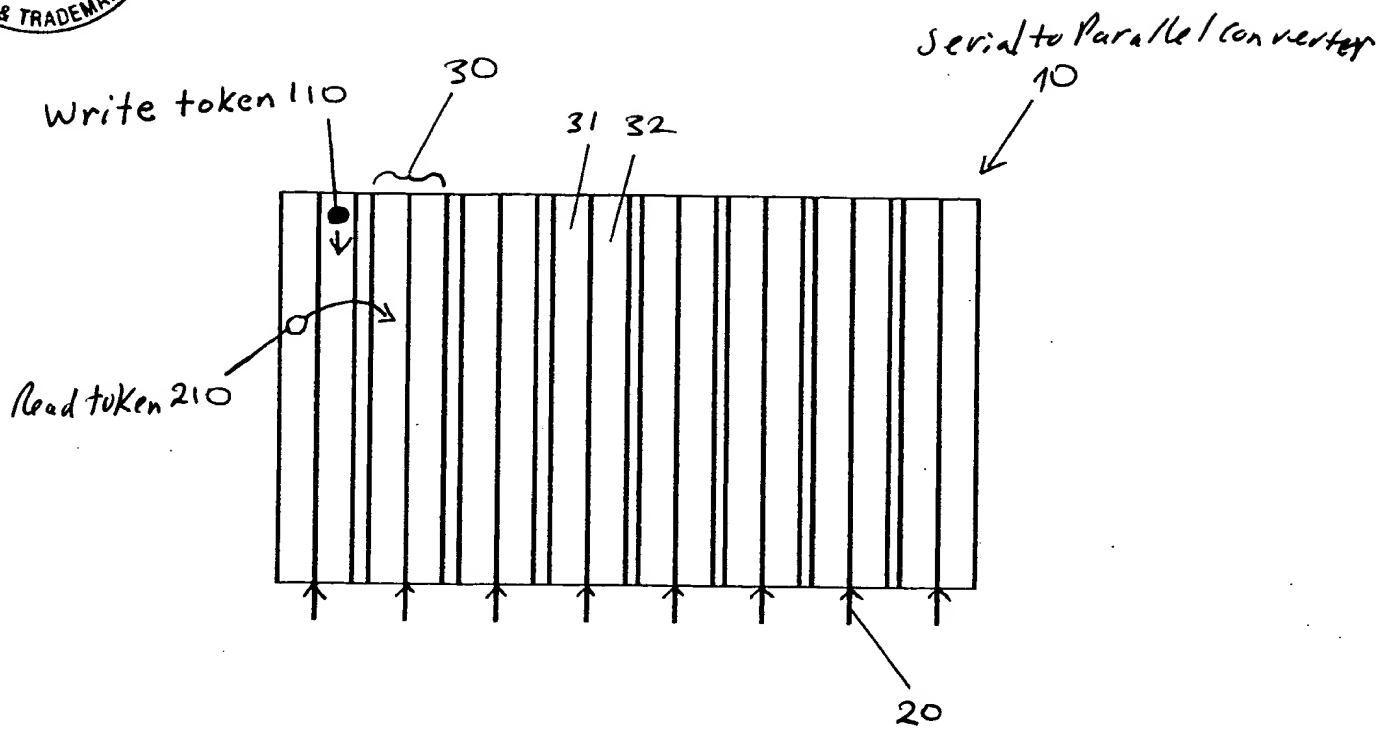Read token 210

20

Fig. 4

Serial to Parallel converter 10

Read token 210'

30

Upper half of ATM Cell

A

Read token 210"

31 32

20

Fig. 5
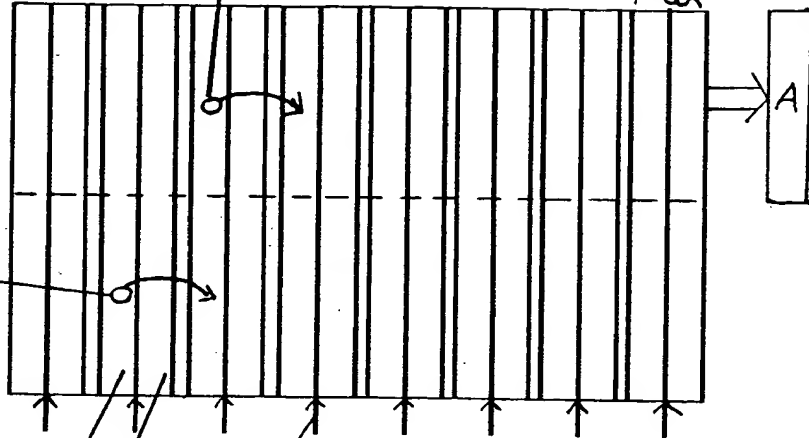
Parallel to Serial Converter 11

20

16

400

write controller

424 bits

31

32

Read controller

300

30

Fig. 6